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# Earth's Water Crisis

Eric Fondriest

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Earth is the Blue Planet, there can be no shortage of water. 71 percent of the earth's surface is covered by water, so then why is there a global water crisis? Well, people can only really use fresh water, and according to the United States Geological Survey (USGS), less than one percent of all the global water supply is actual fresh water that people can use (USGS, 2017). Water is treated as if it were an indefinite resource that you can have access to almost anywhere at any time, in reality water is one of the most valuable resources this planet has to offer. The Water Footprint Calculator, which roughly estimates how much water an individual uses and the USGS shows that the average American consumer uses roughly 50 gallons of water at home daily (USGS, 2015). That number reflects the amount used for showering, using the bathroom, drinking water, brushing your teeth, etc. However, this number does not accurately reflect the amount of water being consumed. The USGS tells us that every day in the U.S. alone, 322 billion gallons of water are consumed (USGS, 2015). So, where is all of this water going? The majority of water consumed by people goes into agriculture. We need to reduce our water footprint by restructuring the way we eat, and changing the way we grow food.

A statistic put out by the United States Department of Agriculture (USDA) shows that 80-90 percent of all the nation's water supply goes into agriculture for industrial purposes (USDA, 2019). A study by the Massachusetts Institute of Technology (MIT) shows a list of all the most water intensive crops. Cocoa, coffee, and rubber are the three most water intensive crops, taking upwards of 13 million gallons every year combined (MIT, 2017). Most people don't think of how much water they use in terms of how much water is required to produce the food you eat. Water is seen as inexpensive and plentiful, therefore it gets wasted in such awful ways. According to a Netflix documentary series called

Explained, Mexico City loses over half of its freshwater every year due to leaky pipes. Many countries do not use water conservatively for crops, and instead just flood their crops with an excessive amount of water, which can also lead to nasty runoff.

Everything you eat requires water in one way or another to produce. However, even cocoa, coffee or rubber don't compare to the amount of water required to produce meat. Meat is by far the product that requires the most water to produce. A statistic put out by Water Footprint Calculator can tell us that to produce one pound of chicken meat requires roughly 500 gallons of water. One pound of pork requires roughly 800 gallons of water to produce. The animals that consume the most water, however, are cows. It takes almost 2,000 gallons of water to produce just one pound of beef (Hoekstra, 2017). To put it into perspective, one standard quarter pound burger takes 660 gallons of water to produce; including the bun, lettuce, tomato and all the condiments (USGS, 2016). As you can clearly see, meat requires lots of water to produce, and meat is also one of the most coveted foods in the world. Americans tend to enjoy meat daily, and other countries seem to be adopting American habits, such as Japan. However, if more countries start eating like Americans, then the water crisis will only get exponentially worse.

The amount of people who haven't heard of Day Zero in Cape Town, South Africa is staggering. Day Zero marks Cape Town in South Africa as the first town in history to indefinitely shut off its water supply to civilians. Day Zero was initially set for July in 2018. After news started spreading, people got worried and started conserving more water. Since then, the amount of water usage per capita has drastically decreased, and they pushed back the date to 2019. They kept postponing Day Zero, because their water conditions had drastically improved due to an increase in awareness and worry for water. As of now, Day Zero has been indefinitely postponed until a crisis arises again. Is this what it takes to start conserving water? Change is possible, we just need to be more active about it.

There is such a ridiculous demand for protein today, that many people are not willing to consider giving up meat. If you bring up 'protein' in a conversation, most likely the only thing brought up will be meat, or how vegetarians and vegans have a lack of protein. This is a dangerous misconception. There has never been such a closed mindset surrounding vegetarians as there is today. The only people who need this absurd amount of protein are olympic athletes or body-builders. Most people like meat because they say it tastes good. There

are healthier alternatives to protein, such as quinoa, lentils or beans. People need to be educated on the issues surrounding water usage for food in order for them to change their diets.

Over 70 percent of our planet is covered with water, but we can only use as little as one percent of all the water we have to supply everyone on Earth. Too many people treat water as an infinite resource. If we don't start changing our ways soon, Day Zero will become a global issue starting with locations such as London, Hong Kong, and Brazil.

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